Dear Colleagues and Friends of the University of Wisconsin-Madison:

As the UW-Madison approaches its sesquicentennial celebration, we face the challenge of renewing the campus physical environment. To address these challenges, in 1994 the UW-Madison initiated the development of a comprehensive Campus Master Plan. After two years of collaborative planning activity involving campus, community, and state participants, the University of Wisconsin-Madison is proud to endorse the Campus Master Plan.

The primary purpose of the Campus Master Plan is to define a framework of opportunities within which the university, city, and state leaders can make future decisions on upgrading existing systems and accommodating new facilities, thus creating an exciting and inviting campus environment. The Campus Master Plan attempts to balance opportunities that include facilities renewal, development and demolition, infrastructure upgrades, new development patterns, traffic and parking system modifications, transportation demand management strategies, and open space enhancements.

The Campus Master Plan addresses the challenges and opportunities before us, including: a rising demand for more sophisticated and technologically enriched academic facilities, a need to address the growing deferred maintenance backlog, and the need for collaborative planning. The UW-Madison is not alone in addressing these challenges.

Higher education in the United States is undergoing significant transformations. New ways of receiving and disseminating information, innovative teaching techniques, and state-of-the-art research initiatives require new facilities and environments.

Permanent fiscal challenges, however, limit unilateral options. The Campus Master Plan identifies the importance of strengthening existing partnerships as well as building new relationships. Future consideration of the opportunities listed in the Campus Master Plan will require intensive campus discussions with alumni, donors, private developers, neighborhoods, and city, state and federal policy-makers.

A cornerstone of the Campus Master Plan was its participatory focus. The UW-Madison realizes that the future development and quality of the campus and the surrounding neighborhoods and communities are intricately linked. The two-year planning effort actively involved UW-Madison faculty, academic staff, and students, as well as neighborhood, municipal governments, and state representatives.

The Campus Master Plan is the first step in comprehensively identifying future development opportunities. Implementation will require further campus and community investigation and discussion. It is our hope that the Campus Master Plan will serve as a beacon in guiding physical development opportunities into the next century.

David Ward
The University of Wisconsin-Madison was created in 1848 and became a Land Grant institution when Congress adopted the Morrill Act in 1862. Today, as the state’s flagship institution, it enjoys statewide, national, and international reputations. The 900-acre campus supports a total population of nearly 51,000 with 34,000 full time equivalent (FTE) students and 17,000 FTE employees. The University manages over 220 buildings, some of which are the oldest and most historically significant in the state. The University’s prominent position as one of the country’s leading public research institutions is reflected by the nearly $400 million it receives annually in the form of research grants.

The Master Plan will guide the UW-Madison campus in: 1) creating an even more distinctive sense of place; 2) developing places to stimulate social interaction; 3) establishing a stronger sense of order; 4) protecting future building opportunities; and, 5) defining ways that limited physical and financial resources can be used most effectively.

The Plan ensures flexibility by defining future opportunities within the context of existing patterns. Some of the proposed directions can be implemented almost immediately; others not for many years; and still others may never come to fruition. Higher education is entering a period of significant change. Fundamental and traditional concepts relating to teaching, financing, and facility needs are being challenged. The UW-Madison’s recent growth reflects these patterns and it is clear that even greater changes are likely to come.

The University has experienced considerable physical growth in recent decades. Today, however, the need for new facilities is driven not by enrollment growth, but by the need for more specialized, technology-oriented facilities. This is just the beginning. New ways of receiving and distributing information, innovative teaching techniques, and state-of-the-art research initiatives require new strategies. Because the future is so uncertain, flexibility is key.
The Master Plan benefits from an unusually intensive and interactive planning process. It is one of the most open and engaging planning initiatives ever employed by the University. The result has been strong support among all campus components including faculty, students, and staff. Meaningful insights and improved communication have brought municipal representatives and neighborhood groups closer together. This is, however, only the beginning. It is essential that state, University, municipal, and neighborhood representatives continue to consider issues of mutual concern in order to achieve a foundation of trust and understanding. A cooperative approach will be needed if critical campus edge components of the plan are to be realized.
The University of Wisconsin-Madison campus is located in Dane County, less than a mile west of the State Capitol. Inland lakes create a narrow isthmus of land where concentrated development patterns are accommodated within a scenic setting. The campus is well known for its location along the edge of Lake Mendota. The lakeshore bicycle and walking path, the siting of the Memorial Union, water-oriented recreational opportunities, and distant views from the center of campus make this institution distinctive. Madison, with an expanding population approaching a quarter million, is both culturally and historically diverse. In 1986, Money Magazine rated Madison the number one American city in which to live.

The UW-Madison campus is a dynamic part of the community and one of the largest population concentrations in the area. Housing, parking, and vehicular circulation are sensitive points of interface with surrounding neighborhoods. Of greatest concern is automobile circulation. University Avenue and Johnson Street are critical components of the regional road system and provide the principal means of travel through the isthmus. They offer access to many important community destinations including the Capitol Square, Central Business District, and the University.
The University is aggressively moving into the 21st Century. Over the past decade the campus has accommodated 14 major new buildings or building additions. Much of this growth has been accommodated to the south and west. The campus community has expressed concern because much of this development does not reflect the character of Bascom Hill and older portions of campus. The core area of campus is revered because of its architectural scale and character, careful integration of open space, and strong "sense of place". Too little emphasis appears to have been placed on creating integrated building groups and inviting environments. Therefore, throughout the planning process, special attention is placed on opportunities to improve campus organization, image, and character.

The following planning principles define broad concepts upon which the Master Plan is based.

**Comprehensive Approach**
- Carefully protect future building sites and implement an integrated architectural design process which considers open space, pedestrian circulation, utility, transportation and parking impacts, and opportunities.
- Insure that new projects contribute to the overall character and quality of campus.

**Building Opportunities**
- Use buildings to define open space, create major clusters of related facilities, and strengthen campus identity.
- Recognize that building sites are limited and therefore warrant a high level of land use efficiency.

**Open Space**
- Integrate open space into the campus fabric, particularly in newer areas, in order to humanize the campus, strengthen the institutional image, and stimulate interaction.
- Give structure to the campus by creating major open spaces which are connected via pedestrian linkages.

**Pedestrian Circulation**
- Enhance campus wayfinding, safety, and pedestrian movement.
- Accommodate the disabled and, whenever possible, separate automobiles, pedestrians, and bicycles.
- Create pedestrian surface and elevated walkway corridors which link major destinations. Concentrate pedestrians within major corridors.

**Vehicular Circulation and Transit**
- Improve the capacity of existing community roads which service the campus without building new roads or major street widenings.
- Achieve a simple, direct, and easily understood campus road system which discourages private automobile use.
- Develop a comprehensive and efficient campus transit system which provides a timely and cost-effective alternative to travel by private automobile.
- Provide an effective interface with the local municipal bus system.
- Continue to support regional rail access and protect three potential on-campus station sites.
Bicycle Circulation
- Recognize bicycles as an essential mode of transportation.
- Encourage increased ridership by creating major campus corridors and improved storage opportunities.
- Create separate bicycle and automobile routes including in-street lanes and off-street paths whenever possible.
- Connect campus corridors with regional routes.

Parking
- Increase the availability of parking spaces needed to meet current deficiencies.
- Use above-ground parking decks whenever possible, preferably located on the campus perimeter and served directly off a major public street.
- Position decks within a ten-minute walk of major destinations.
- Protect future parking deck sites in case they should be needed.

Joint Public/Private Development
- Explore with the city and private sector representatives opportunities for future development along the campus perimeter.

Security/Safety
- Locate major high-volume pedestrian corridors within the campus interior and insure appropriate illumination.
- Maintain bicycle patrols, monitor late evening parking deck use, and maintain up-to-date emergency call appliances across campus.
- Supplement foot travel with efficient, evening, door-to-door shuttle service.
- Provide close-in research parking for late night use.

Utilities
- Address current production and distribution deficiencies.
- Protect future utility corridors and facility expansion sites.
- Construct continuous distribution loops.
- Continue to explore alternative energy sources.
- Monitor capacity thresholds and anticipated demands.
CAMPUS WIDE

PATTERNS & OPPORTUNITIES

A critical master planning concern is the need to achieve visual and functional continuity across the entire campus. While major subcampus areas or precincts frequently exert their own image, these areas still must relate to and fit within the overall campus context. The following materials help define a campus-wide framework for the University of Wisconsin-Madison.

Building Opportunities

The Opportunities Plan identifies 50 potential building sites with a capacity of approximately 4.7 million gross square feet of new space. Most of these sites are located in the west and south campus areas. However, 3.0 million gross square feet of new building space is the maximum that could be added because of the more limiting constraint imposed by community roads. The 3.0 million gross square feet capacity threshold represents 30 years of development, assuming a growth rate comparable to the last ten years.

- Three major Medical Science Center facilities are proposed west of the WARF Building. These include the Pharmacy, Learning Center, and Interdisciplinary Research buildings.
- Major high technology research facilities should be located within similar geographic areas.
- Important joint University, city, and private developer opportunities are available. These include commercial, residential, and mixed-use development opportunities south of Dayton Street, and at two locations along University Avenue.
- Major Support Service Centers are proposed next to the Walnut Street and Charter Street Heating Stations.
**Open Space Opportunities**

Open space has played a major role in creating the pleasant character exhibited within the older established areas of campus. The lake edge and major park areas such as Bascom Hill, Henry Mall, and Library Mall are designated as irreplaceable spaces. Approximately 11 acres of additional open space is proposed, the vast majority being located in the newer and more highly developed areas of campus.

- All natural, environmentally sensitive, and historic areas (e.g., Native American burial mounds, Camp Randall, lakeshore open space, Willow Creek, and Class of 1918 Marsh) should be protected.
- Open spaces identify important activity centers and facilitate wayfinding.
- Major open spaces help define key areas of campus. This includes the Linden Drive Plaza and the Union South Oval. These centers are connected via important open space and pedestrian/bicycle corridors including Linden, Randall, Dayton, and Murray Malls.

**Pedestrian Circulation Opportunities**

Walking is the most important form of campus circulation. Approximately 25% of all students, faculty, and staff currently walk to campus. Because of the large number of vehicles traversing the campus, pedestrian safety is a valid concern. This is particularly true in areas where walkways, bicyclists, and automobiles are accommodated within the same corridor.

- Elevated walkways and restricted access corridors are used to separate pedestrians and vehicular traffic.
- Personal safety can be improved by encouraging large volumes of pedestrians to travel together along major corridors. The corridors are proposed to be located within mid-block areas, appropriately illuminated, serviced with emergency call boxes, and carefully patrolled by police.
Bicycle Opportunities
Bicycles are a serious transportation option at the UW-Madison. Approximately 20% of the campus population are warm weather bicycle commuters. Even in winter months, bike racks are well utilized. To increase bicycle use requires improved safety and convenience. The on-campus bicycle system is upgraded by adding new paths and creating a number of automobile-free bicycle routes.

- Paths along Willow Creek and north of the CSC will connect interior campus and proposed regional routes.

Vehicular Circulation Opportunities
Private automobiles are the major means of accessing campus. Today, peak period congestion on most of the streets surrounding the campus represents a significant problem for both the community and the University. City streets are the single most significant physical constraint to expanding future campus development. Roadway modifications are crucial because they impact safety, wayfinding, image, and campus organization. This is particularly evident in the south campus area.

- Three Campus Drive intersections warrant upgrading. These include University Bay Drive, Walnut Street, and Babcock Drive. The improved Babcock intersection can accommodate left turns into and right turns out of campus. Other intersection upgrades include University Avenue/Campus Drive and Engineering Drive.

- Randall Avenue from Dayton to Johnson Street/Engineering Drive can be converted into a major pedestrian/bicycle mall, thereby increasing pedestrian safety. In the more distant future this treatment could be extended southward to Spring Street. A similar treatment is considered along Dayton Street between Charter Street and Randall Avenue.

- To increase vehicle capacities without constructing new streets or implementing major road widenings, it is proposed to make Charter and Mills Streets a one-way pair. This will facilitate westbound turns onto University Avenue and northbound turns onto Charter Street when entering campus.
Transit Opportunities
The University is committed to increasing transit ridership in order to minimize costs, improve pedestrian and bicycle safety, reduce parking needs, and protect long-term campus development opportunities. A very aggressive transit strategy is identified which includes expanding existing on-campus transit service and implementing alternative techniques including remote parking, regional rail, transportation demand management (TDM) initiatives, bicycle, and pedestrian travel.
- Regional, municipal, and University transit systems should be integrated to facilitate travel to and from the campus while increasing transit efficiency both within the central core and between major campus destinations.
- Municipal light rail and regional rail opportunities should be integrated with campus development. Reserve sites to accommodate regional rail stations at the Kohl Center, Union South, and CSC.
- The bus system should be supplemented with door-to-door shuttle service for special high demand facilities and events (i.e., health sciences, libraries, and Kohl Center).

Campus Identity Opportunities
Major campus entrances require special attention to properly identify the institution and provide directional guidance for visitors. Improvements are required and are being implemented in the campus directional signage program in order to establish a unified and well-coordinated system. Information booths are proposed along Walnut Street, Park Street, and University Avenue to aid visitors.

Parking Opportunities
Currently, the campus is short 2,000 staff and visitor spaces. This shortage is primarily concentrated within the lower campus area. A comprehensive strategy has been developed to deal with these shortages and to protect the undeveloped areas, which will hopefully never be needed. Future deck sites have been reserved in case alternative modes of travel are not effective, if increases in visitor parking demands occur, or if the campus population increases.
- Parking decks should be located on the perimeter of campus, contiguous to transit stops, and directly accessed from major collector streets. They should be within a ten-minute walk of major academic destinations and five minutes from major visitor destinations. Because of cost advantages, above-ground, independent decks of approximately 500 or more spaces should be considered.
- To accommodate the existing 2,000 space deficit, it is recommended that two existing decks be expanded (CSC and Southeast Campus Ramp), and that one underground deck (600 block University Avenue), and three new above-ground decks be constructed (Lake Street/University Avenue, Engineering, and Steenbock Library).

Utility Capacities
Improvements to the campus utility system are needed to address current production and distribution deficiencies as well as future expectations. Good progress is being made to overcome these shortages. Chilled water and steam are the systems of greatest concern. Future plant expansion sites and utility corridors are reserved.
Infrastructure Requirements and Limits to Growth

New buildings are frequently constructed with little regard to their impact on important infrastructure systems. While site selection is recognized as a critical concern, plaza and landscape treatments, utilities, parking, and vehicular circulation/transit components are given less attention. By understanding capacity limitations and interdependencies, a clearer picture of what resources are available to support future development evolves. This allows the University leadership to more clearly understand the impacts and development priorities, as well as to understand the financial ramifications of proposed building projects.

The accompanying diagram conveys information regarding site availability, utilities production and distribution, and parking and road capacities assuming strong transit and other alternative transportation modes. The community road system is the single most limiting obstacle to future growth at the UW-Madison. Assuming aggressive transit, TDM, and infrastructure improvement programs are successfully implemented, it is estimated that the campus has the capacity to accommodate three million additional gross square feet of buildings. This assumes that significant improvements are made in terms of utility production and distribution, parking, and transportation. Utilizing recent campus growth rates, it has been suggested that the three million capacity threshold will satisfy campus needs for only the next 30 years.
Based upon existing conditions and anticipated priorities, University representatives selected three campus areas which warranted detailed consideration.

1. WARF and Clinical Sciences Center
   The west portion of campus has the potential to accommodate a significant number of new facilities. Pharmacy, Interdisciplinary Research, and an integrated Learning Center are projected to be located here. Siting new facilities within this area is complicated by several existing federal facilities including the Veteran’s Administration Hospital and Forest Products Laboratory. Important University facilities such as the McClinson Track and the west recreational fields restrict northward expansion. Because much of the remaining area is undeveloped, clearly defined and efficient building patterns must be achieved. Flexibility is also needed should federal priorities change. Growth demands are intensifying as research needs expand and major components of the health science programs are shifted to this area. The proposed relocation of certain Medical Science Center facilities will occur over an extended period of time.

- There are four major University building sites, a parking deck site, and an area for expanding the existing greenhouses. A Support Services Center is shown contiguous to the Walnut Street Heating Station, including three small building sites. Expansion at the CSC includes the Waisman addition, three major building zones, and two new parking deck locations. Vertical expansion of the existing patient deck is anticipated.

- The relocation of Observatory Drive north of the McClinson Track optimizes future building patterns. Other road improvements include improving the University Bay Drive/Campus Drive intersection plus the CSC Emergency Room entrance drive. The Walnut Street/Campus Drive intersection will also need to be upgraded should the Walnut Street deck be constructed.

- Pedestrians crossing Highland Avenue can benefit from the two enclosed elevated walkways. These connect both the CSC with the proposed Waisman addition and the development zones north of the Forest Products Lab. A major pedestrian mall is proposed to link the development zones near the WARF Building with the Linden Drive corridor, and the potential Walnut Street parking deck.

- Regional access will be improved by reserving a potential rail station site at Highland Avenue. The proposed regional bike system will benefit from a new bike path along Willow Creek which will provide access to the Linden Drive corridor and Lakeshore Path.
2. South Campus North to Linden Drive

The south campus area has experienced rapid growth in recent years. Large institutional buildings have been placed within an area which has a traditional residential grid. As a result, a number of concerns result. These include the need to:

1) transform this area to look more collegiate and cultivate a sense of place by more clearly defining its edges and creating open space areas;

2) strengthen the physical linkage of the south campus area with the campus core located north of University Avenue;

3) improve bicycle and pedestrian safety by simplifying vehicular travel patterns and creating automobile-free areas, and;

4) define future infill and independent building opportunities.

The following recommendations evolved in response to the concerns identified above.

- Private automobile use of Dayton Street (Randall Avenue to Charter Street) and Randall Avenue (Johnson to Spring Streets) should be restricted by creating major pedestrian, bicycle, and open space corridors similar to the Murray Mall proposal. They are to function as connectors between major destinations and important open spaces. These are considered long-term recommendations.

- A major 2.5-acre oval open space area is shown next to Union South. This community area projects a strong south campus image, encourages student interaction, and accentuates the buildings which define its edges. The park-like area also serves as a strong organizing element in an area of campus which currently lacks such definition. This is likely to be a longer-term opportunity.

- An exciting opportunity exists to initiate a number of joint public/private ventures. This includes the development of apartment style, student housing along the southern edge of the oval open space north of Randall Court. The scale and architectural character of existing privately developed housing should be maintained.

- To increase road capacities and compensate for the closure of Randall Avenue and Dayton Street, Charter and Mills Streets are shown as a one-way pair from University Avenue to Spring Street.

- A regional rail station site is identified just north of the Union South. This facility is directly connected with the elevated pedestrian corridor and bus route thus offering easy access to major campus destinations.

The area defined by University Avenue and Johnson Street is an island connecting the south and main campus areas. The value of this property increases as the few remaining campus core sites are developed. Mixed use opportunities including academic, retail, support services, rail transit, and parking are recommended at this location.

- Excellent opportunities exist for realizing public/private commercial development. Pedestrian access to the shops can be accommodated at street level and from the elevated connector.

- An above-ground parking deck site is shown on the 1300 block of University Avenue. This facility enjoys direct access and egress from Johnson Street and the elevated walkway.
The area surrounding the intersection of Linden Drive and Charter Street is a key component of the central campus area. The Medical Sciences Center district is located here. It includes the Medical School library, classrooms, offices, and research facilities. This intersection is one of the most heavily traveled zones on campus where large numbers of automobiles, bicyclists, and pedestrians converge. Therefore, modifications to this area can have a tremendous impact on how the core area of campus functions.

- Facilities which have a strong functional relationship with the CSC (pharmacy, clinical research, and medical education) should be relocated to the west. Those having close functional ties with other core campus facilities should remain at their current locations. The existing Medical School space should be renovated to accommodate classrooms and offices.

- A number of outdated Medical Science Center buildings will need to be demolished in the future to accommodate three new building sites shown immediately contiguous to the proposed open space. It is suggested that these high priority sites be reserved in order to accommodate uses which support large numbers of students.

- A major campus plaza is proposed. It is anticipated this would be one of the most important gathering and interaction spaces on campus. Punctuated with a large fountain or other focal point, this space would be comparable to Library Mall and Rockefeller Hall in its character.

- Linden Drive is converted into a pedestrian, bicycle, and transit mall. While service vehicles and access for the disabled would be allowed, general private automobile use would be restricted.

- Transit access from the campus core to the west end will benefit by replacing private automobiles with buses on Linden Drive. A major bus transfer station is identified at the Medical Sciences Center immediately north of University Avenue.

- Extending northward from the Union South, the elevated walkway touches down near Linden Drive. This allows for safer, more convenient, and faster pedestrian crossings of University Avenue, Campus Drive, and Johnson Street, avoiding the need for steps and ramping.
3. Murray Mall and the Lower Campus
The lower campus area is a major visitor destination which offers a wonderful variety of public, private, and institutional activities including retail, museums and galleries, academic facilities, student housing, and the new Kohl Center Sports Arena. Many of these destinations will be linked by Murray Mall, which extends from Lake Mendota southward to the dormitories and the new Kohl Center. The Mall functions as a major pedestrian corridor plus offers an exciting collection of landscaped open spaces, sitting nooks, plazas, fountains, sculpture, and a variety of activity nodes designed to stimulate community and University interaction.

- There are five potential infill building sites identified with the largest being contiguous to Vilas Communication Hall, and on the existing surface parking lot next to University Square Mall. All but one of these sites are contiguous to the Mall and will help define the edges of the proposed corridor.

- Murray Mall intersects with a number of major east-west roads. Pedestrians and cyclists crossing Langdon Street and University Avenue will do so at grade, much as they do today. The only potential exception is the Johnson Street crossing where existing grades are more conducive to creating a grade separated configuration. Because of the costs involved with lowering the street elevation, this project is likely to be a longer-term opportunity that should be considered when Johnson Street is ready to be rebuilt.

- An exciting opportunity exists for the city, University, and a private developer to jointly construct a mixed use facility on the 600 block of University Avenue. Currently, the proposed development includes School of Business conferencing facilities, overnight guest rooms, and underground parking.

- An above-ground, major parking deck location has been identified at the intersection of Lake Street and University Avenue. A public/private development opportunity exists to integrate retail shops at the street level and along the University Avenue edge.

- A strategy is being implemented for providing the 4,000 parking spaces needed to support major events at the Kohl Center. This includes a combination of University parking facilities and leasing of privately owned and operated surface and deck spaces.
Murray Mall and Lower Campus
PLANNING PRIORITIES

Development priorities are addressed through the state capital budget process. The following projects (not in priority order) include major Master Plan recommendations that the University will be addressing in the near-term.

- Pharmacy
- Waisman addition
- Chemistry expansion
- Health Sciences Learning Center, Interdisciplinary Research Center
- Parking decks and surface parking
- Utility system expansion and upgrades
- Engineering Centers
- Linden Drive and Randall Avenue restricted access malls
- Charter Street and Mills Street one-way pair
- Intersection improvements to Campus Drive/University Bay Drive, Campus Drive/Babcock Drive, and Engineering Drive/University Avenue
- Murray Mall development
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As members of the Master Planning Team, the following groups played critical roles in the development of this plan. They deserve full recognition for their dedication and willingness to spend long, sometimes frustrating, but almost always fruitful time listening, questioning, and contributing.

Committees
- University Steering Committee
- Community Concerns Committee
- Overview Committee

State, University, and Municipal Staff
- State Department of Administration, Division of Facilities Development
  - City of Madison
    - Mayor's Office
    - Department of Planning & Development
    - Department of Transportation
    - Engineering Division
- Village of Shorewood Hills
- University Division of Facilities Planning and Management
- University of Wisconsin System Administration
- Neighborhood Organizations

Consultant Team
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- HLM Architecture
- HNTB Corporation Transportation, Transit, and Parking
- Affiliated Engineers, Inc. Utilities
- Ken Stalki Design Landscape Architecture
- Hammond Design Graphic Design

Photographs courtesy of the Consultant Team and University Department of Public Relations

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